



# *Climb the Ladder*

Martin Durcik

MONTIPOWER  
Monti-Werkzeuge GmbH  
Hennef, DE

MONTI® Group  
turnkey  
solutions for  
Your projects  
under one roof:

some of our brands:



Visco-elastic coatings



High pressure water jetting



Surface preparation technologies



**STRONGPIPE**®

Composite pipe repairs

# What is surface prep?

- Removal of rust, corrosion, existing coating
- Creating a new profile
- Remove contaminations (oil, grease, chlorides)
- Remove millscale
- Feather the edges of linepipe coating

# Do the job quickly and safely and go home...

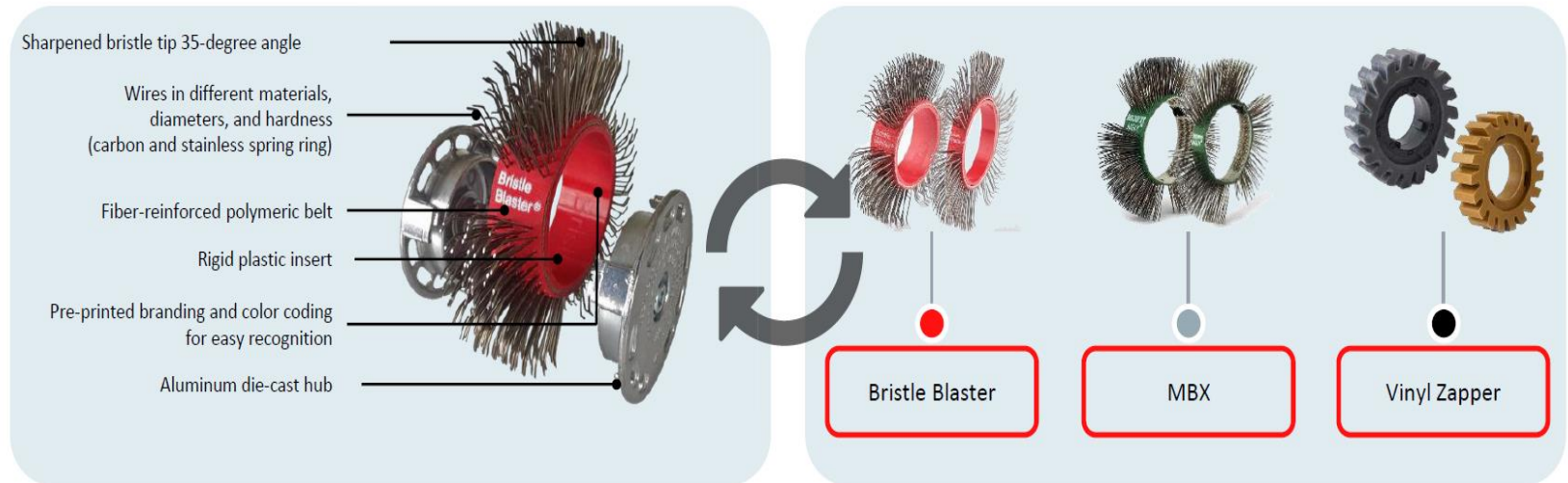
## Reduce Cost & Time Re-sharpen and Re-use Recycle

## & Climb the ladder

# Bristle Technology

>10,000 STRIKES A SECOND WITHOUT BURNISHING THE SURFACE

The core of MontiPower's bristle blasting and manufacturing expertise



**INDUSTRIAL**  
Bristle Blasting Solutions

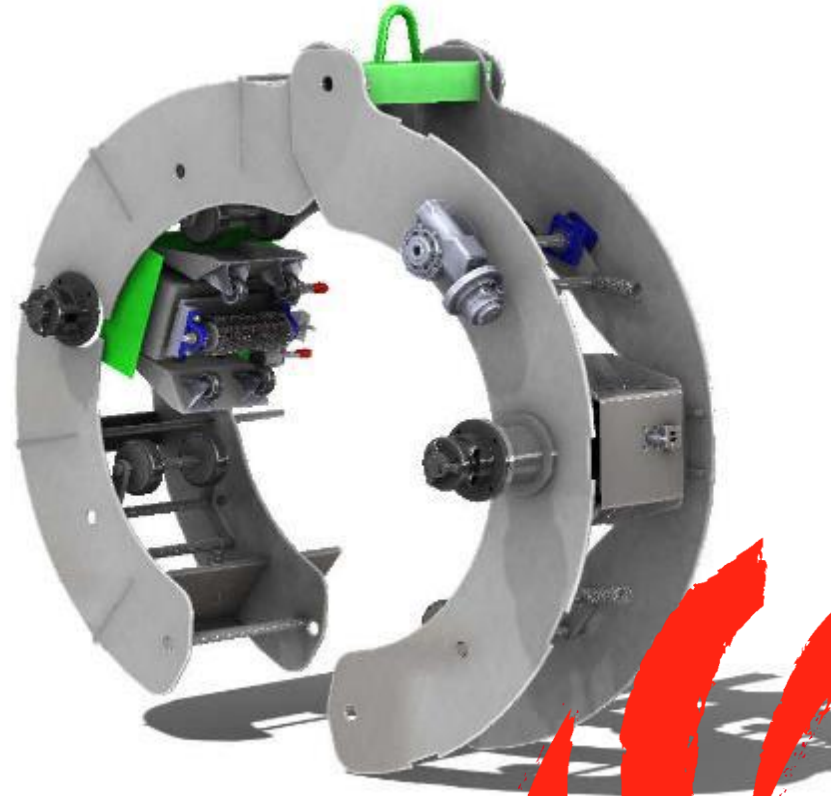
**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment

# Manual and semi-automatic explained



**INDUSTRIAL**  
Bristle Blasting Solutions

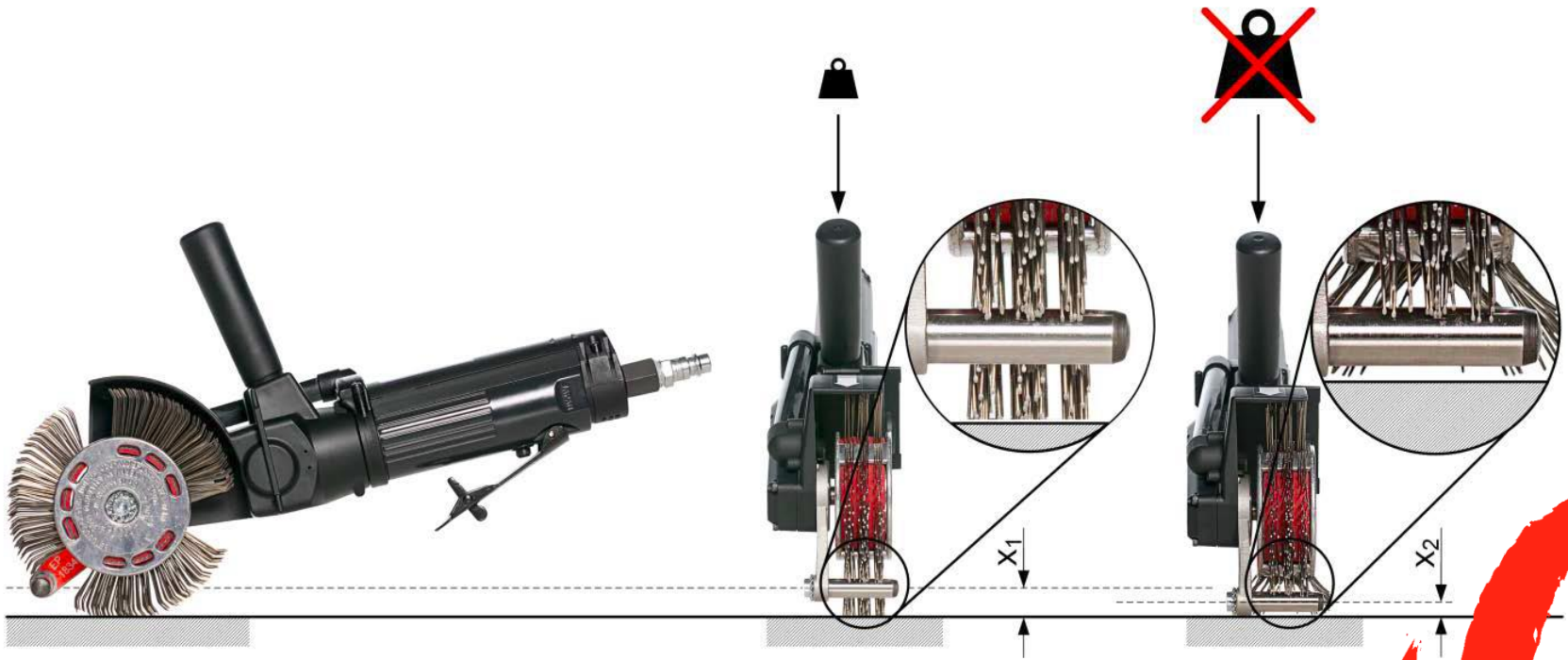
**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment

# Pneumatic, Cordless, Electric and Waterdriven



**INDUSTRIAL**  
Bristle Blasting Solutions

**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment

# Bristle Blaster Double



**INDUSTRIAL**  
Bristle Blasting Solutions

**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment







# Bristle Blaster Cordless



**INDUSTRIAL**  
Bristle Blasting Solutions

**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment



# The Q4 Prepper Machine



## Specifics:

- 100mm wide preparation
- Modular version
- Lightweight
- Quick change bristle spindle
- Adjustable Accelerator bar for selecting roughness
- Revolutionary Spiral Brush Design

## Drive units:

- Battery powered, 36V
- Transformer 120V
- Transformer 240V
- Aqua hydraulic Atex Zero

# Video-FieldJoint prepper Q4 Framed app



## Specifics:

- 100mm wide preparation
- Adjustable Clamp Frame version
- Semi automatic
- Aluminum Lightweight frame reducing cycle times
  - Easy handling
  - Easy positioning by only 2 people
- Extreme low mob- demob cost
- Suitable for pipelines up to 24Inch
- Dust collector

**INDUSTRIAL**  
Bristle Blasting Solutions

**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment

# Operations

## Application speed:

- Surface preparation Width per pass, 100mm
- Average Forward travelling speed, 1m/min.

## Application Example:

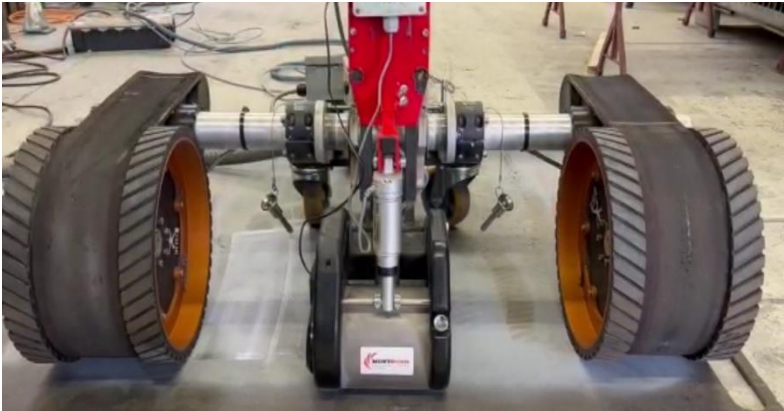
Pipe diameter: 48 Inch  
Cutback Width: 150 mm  
Cleanliness grade: Sa 2 ½ ISO 8501-1 comparable  
Roughness: >Rz 55 Micron

Number of side-by-side passes needed: 3

Application speed: 1mtr/min.

**Total application time: 12 Minutes**

# FieldJoint prepper Q4 Crawler



## Specifics:

- 100mm wide preparation per pass
- Multifit Magnetic Wheel version
  - For diameters > 25 inch
- Automated solution
- Adjustable application / travel speed
  - 1 – 25mm/sec.
- Adjustable brush pressure
- Dust collector



**INDUSTRIAL**  
Bristle Blasting Solutions

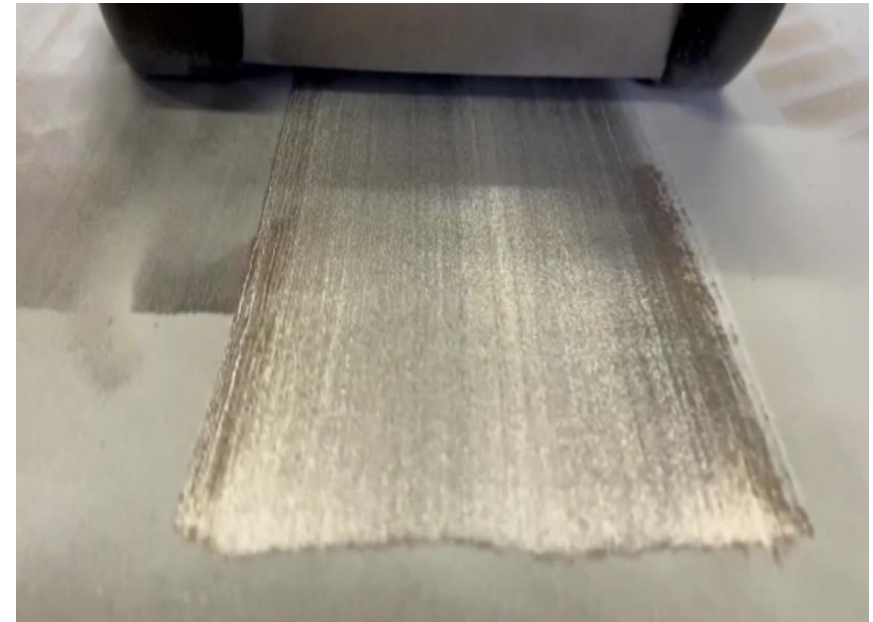
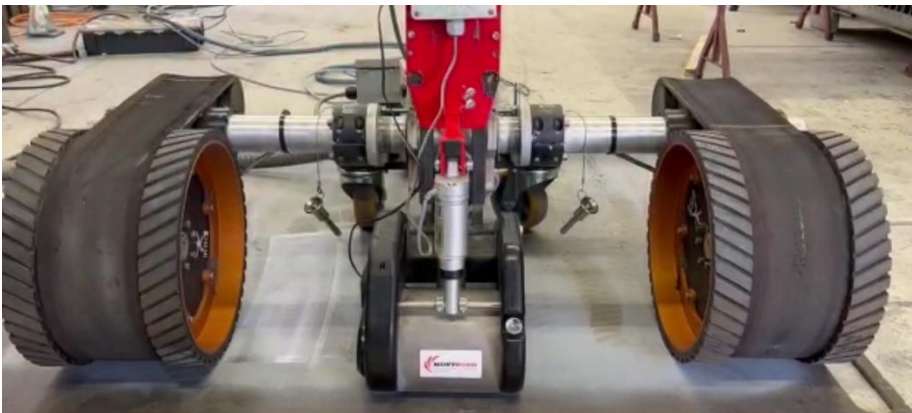
**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment

# Regular Surface Profile >50 micron



**INDUSTRIAL**  
Bristle Blasting Solutions

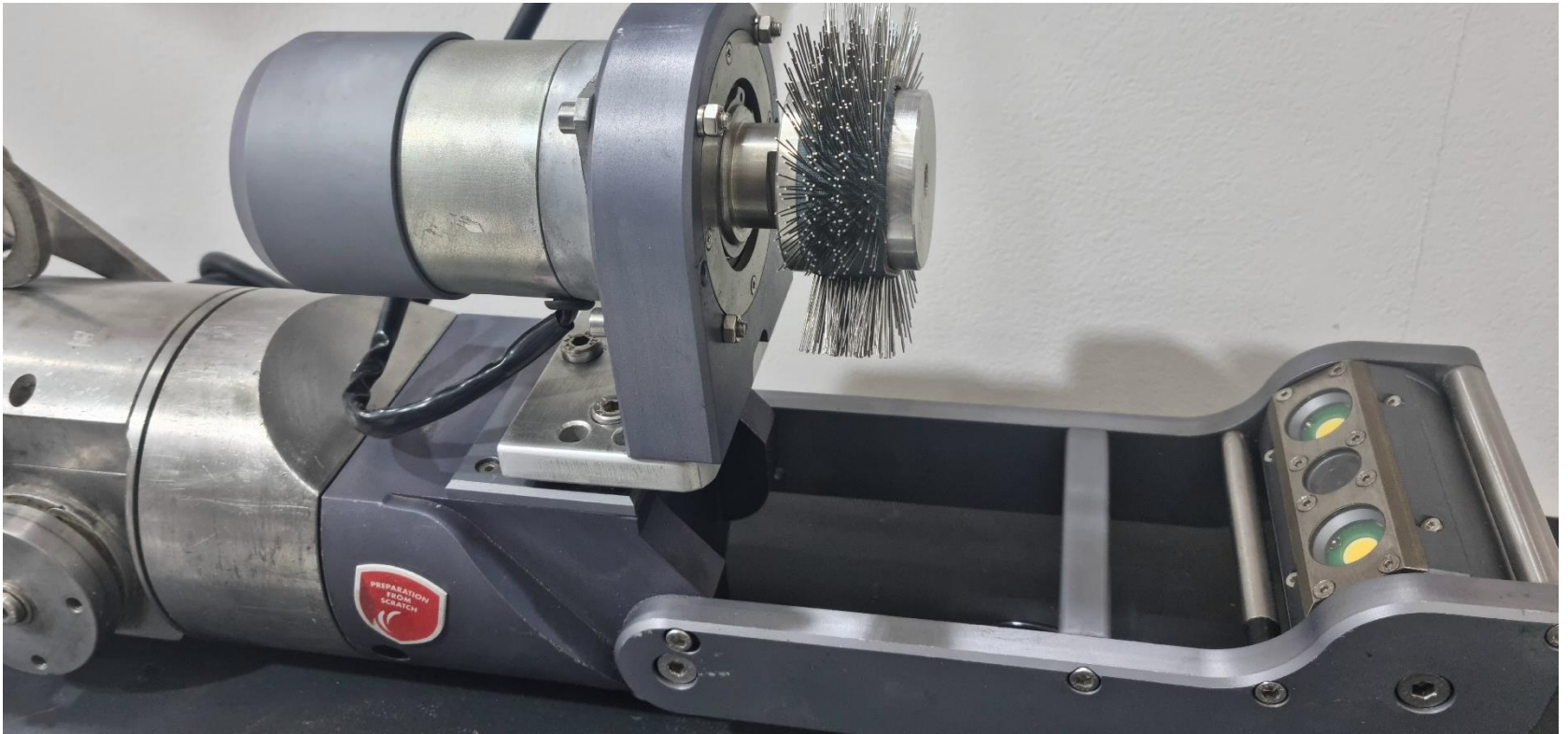
**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment

# Internal Autarq



**INDUSTRIAL**  
Bristle Blasting Solutions

**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment

**MONTIPOWER  
STEELCARE  
PROFESSIONALS**

**CO<sub>2</sub>  
NEUTRAL  
BLASTING**

MADE IN GERMANY





Grit Blasting:	
Resource	2 workers
Prep. Works	60 minutes
Working Time	10 minutes
Clean-up Time	60 minutes
Consumables	1. Ground Sheets 2. Grit
Equipment	1. Pot and Gun 2. Machine 3. Tethered Hose 4. Compressor
Environmental	1. Contaminated Waste 2. Noise Levels
Safety	Air-fed PPE
Time	260 minutes (130 x2)



Bristle Blasting:	
Resource	1 worker
Prep. Works	20 minutes
Working Time	20 minutes
Clean-up Time	5 minutes
Consumables	• Ground Sheets
Equipment	• Bristle Blaster
Environmental	No grit required
Safety	Atmosphere Check
Time	45 minutes (45 x1)

## Performance:

**INDUSTRIAL**  
Bristle Blasting Solutions

**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

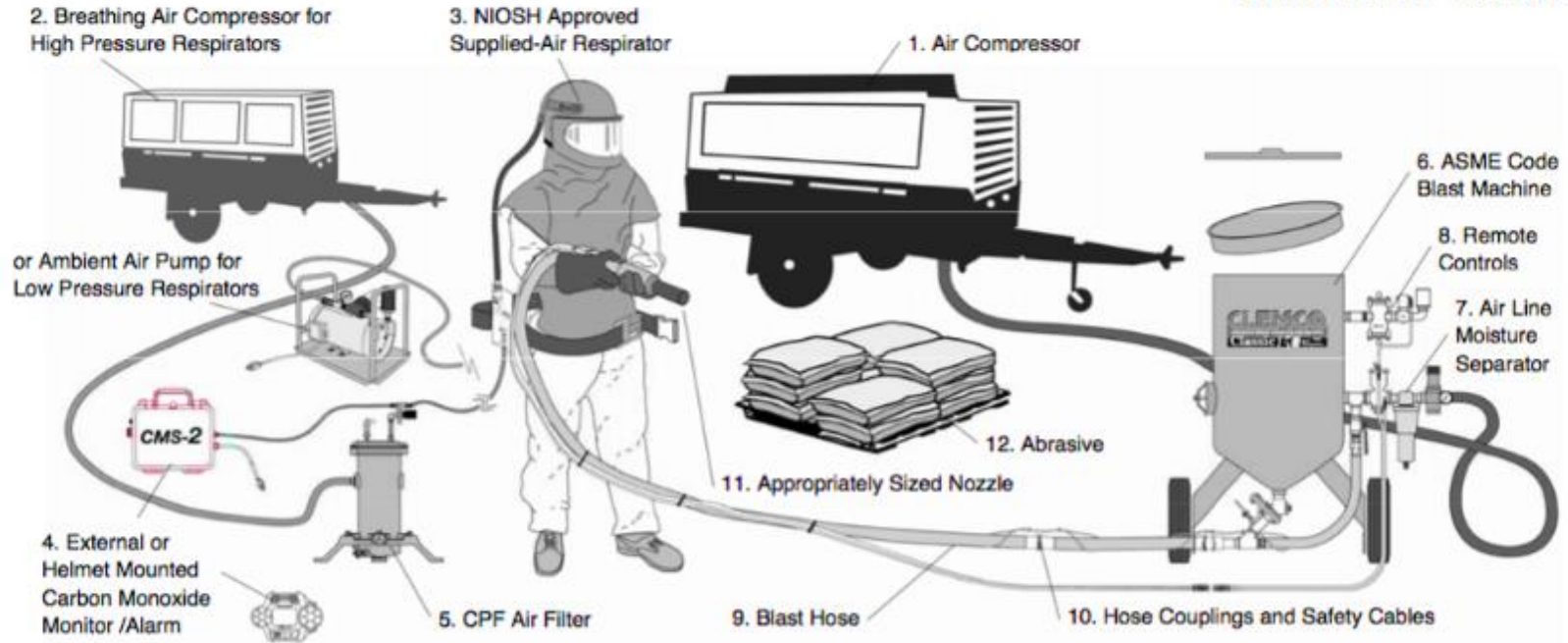
**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment

# Save 33,5Kg Co<sub>2</sub> emissions per 1Sqm with Bristle Blaster versus open blasting with loose abrasives

(source: vanderende maasvlakte report)

## DAILY SET-UP CHECK LIST



**INDUSTRIAL**  
Bristle Blasting Solutions

**MARINE**  
Subsea Surface Profile &  
Cleaning Solutions

**MOBILITY**  
MBX-IT® Metal Blast  
Cleaning Solutions

**INFRA**  
Surface Profile &  
Cleaning Solutions

**CLEANTECH SERVICES**  
Cleantech Rental &  
Turnkey Equipment

# Climbing the Co<sub>2</sub> Ladder

*Selection of correct powertool or machine/ belts for the job  
30 EURO/m<sup>2</sup> for Bristle Blaster set  
avoiding Capex investments in blasting equipment*



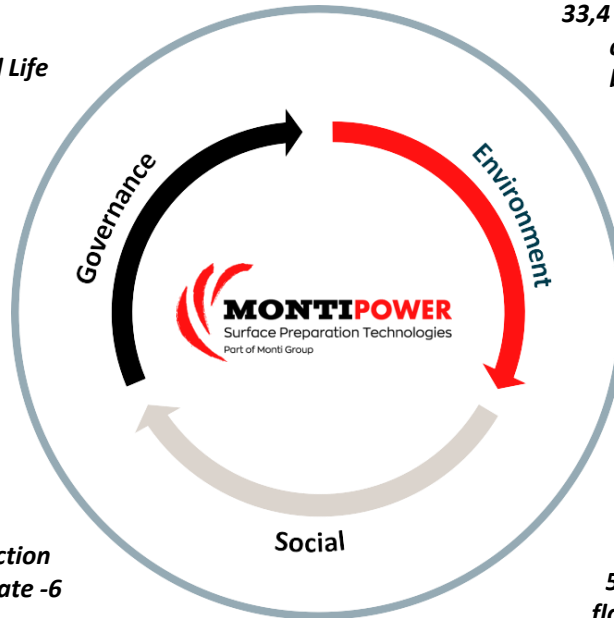
*Gruener Punkt Packaging & Second Life tool Program*



*Protection of labor rights and promotion of worker safety for noise, vibration below PPE levels except for eye-wear*



*Dust & Coating Particle Suction without exposure to Chromate -6*



*33,4 Kg CO<sub>2</sub> avoided compared to grit blasting*

*Rooftop solar panels and carbon neutral production facility*

*30-90kg grittal chemical waste removal avoided*

*5x faster to prepare a flange for the total time*





# Any Questions???



[www.montipower.com](http://www.montipower.com)

[corronation.com](http://corronation.com)

[alter.com](http://alter.com)

Africa - Americas - Australasia - Brazil - China - France - Germany - Holland - India - Japan - Middle East - Russia - South East Asia - UK